



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,425	07/29/2003	Herbert Muller	021123-0257987/970044CK	4172

25461 7590 06/02/2004

SMITH, GAMBRELL & RUSSELL, LLP
SUITE 3100, PROMENADE II
1230 PEACHTREE STREET, N.E.
ATLANTA, GA 30309-3592

EXAMINER

NGUYEN, CAM N

ART UNIT PAPER NUMBER

1754

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,425

Applicant(s)

MULLER ET AL.

Examiner

Cam N Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 29, 2003 (a continuation of 09/158,398)
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/29/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION***Claim Objections***

1. Claims 34-60 are objected to because of the following informalities:
 - A. Claim 34, step (a), line 2, --a suspension-- should be inserted after "applying".
 - B. Claim 34, step (a), line 3, "a suspension" should be changed to --the suspension--.
 - C. Claim 34, step (ii), line 6, ": SiO₂; Al₂O₃; TiO₂ and ZrO₂" should be changed to --SiO₂, Al₂O₃, TiO₂, and ZrO₂--.
 - D. Claim 34, step (c), "the preparation of step b)" should be deleted.
 - E. Claim 35 thru claim 60, line 1, "of" or "of either" should be changed to --according to--.
 - F. Claim 35, line 3, ": SiO₂; Al₂O₃; TiO₂ and ZrO₂" should be changed to --SiO₂, Al₂O₃, TiO₂, and ZrO₂--.
 - G. Claim 36, line 3, ": glass; quartz; ceramic; silica; alumina; graphite; molded carbon; metal; or steatite" should be changed to --glass, quartz, ceramic, silica, alumina, graphite, molded carbon, metal, or steatite--.
 - H. Claim 38, line 2-3, ": a hollow extrudate; solid extrudate; sphere; granule; tablet; and strand" should be changed to --a hollow extrudate, solid extrudate, sphere, granule, tablet, and strand--.
 - I. Claim 44, line 3, ": Ru; Rh; Pd; Ag; Os; Ir; Pt; and Au" should be changed to --Ru, Rh, Pd, Ag, Os, Ir, Pt, and Au--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102(b)

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 34-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Durand et al., "hereinafter Durand", (US Pat. 5,723,403).

Durand discloses a process of producing a catalyst, said catalyst comprising a catalytically active phase (A) deposited on a support having an open porosity of 80 to 99.9%, and comprising a monolithic structure or braided or interlocked fibers, said process comprising: (a) preparing an aqueous suspension containing particles of at least one refractory inorganic oxide and optionally at least a part of a catalytically active phase comprising at least one catalytically active element; (b) filling at least part of the open porosity of said support with the suspension prepared in (a); (c) removing excess suspension from the support by axial centrifuging; (d) thermally treating the support so as to obtain a support coated with a wash coat; optionally repeating (b), (c) and (d); (e) impregnating the coated support with a solution containing any remainder of said catalytically active phase; and (f) thermally activating the coated and impregnated support (see col. 10, claim 1). Said support is a ceramic or metallic support (see col. 10, claim 2). The size of the particles in the suspension is less than 500 microns (see col. 10, claim 3). Durand further discloses that at least one catalytically active element is introduced either partially or totally during coating step (b) or in step (e), by

Art Unit: 1754

impregnating with a solution containing the precursor salts of said catalytically active element (see col. 10, claim 11). The thermal activation is performed in a neutral, oxidizing or reducing atmosphere, at a temperature of about 100°C to 1100°C (see col. 10, claim 12). Suitable refractory oxides including alumina, silica, and titania (see col. 10, claim 13). The catalytically active phase (A) comprises at least one element selected from the groups of metals including the Group VIII metals (see col. 11, claim 15). See also col. 4, ln 44-58. The amount of catalytically active metal in the catalytically active phase (A) is about 0.05 to 3 g, per liter of support (see col. 11, claim 16). The suspension prepared in step (a) contains iron oxide (Fe_2O_3) and cerium oxide (CeO_2) (see col. 11, claim 17). The amount of iron oxide (Fe_2O_3), relative to the wash coat in the catalyst, is about 0.1 to 10% (see col. 11, claim 18). See also Example 1 at col. 5, ln 1-32.

Durand discloses the claimed process of preparing a catalyst, thus anticipates the claims.

Citations

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeJong (US Pat. 4,835,131), Addiego et al. (US Pat. 5,212,130), Yasaki et al. (US Pat. 5,208,206) Haerle (US Pat. 5,179,061), Bar-Ilan et al. (US Pat. 4,900,712) are cited for related art.

Art Unit: 1754

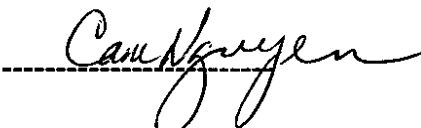
Conclusion

5. Claims 34-60 are originally pending in the application. Claims 34-60 are rejected. No claims are allowed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (571) 272-1357. The examiner can normally be reached on M-F from 9:30 am. to 6:00 pm.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to telephone number (571) 272-1700.



Cam Nguyen

Primary Examiner

Art Unit: 1754

Nguyen/cnn 

June 01, 2004